PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE ENTRY ON THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" OF THE NAME "LIMULUS" MÜLLER, 1785 (CLASS MEROSTOMATA*): PROPOSED CORRECTION OF AN ERROR IN "OPINION" 104

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(Commission's reference Z.N.(S.)506)

- 1. The object of the present application to obtain from the International Commission on Zoological Nomenclature the use of its plenary powers for the purpose of suppressing the generic name Xiphosura Brünnich, 1771, in order thereby to render the name Limulus Müller, 1785 (Class Merostomata*) the oldest available name for, and therefore the valid name of, the genus now habitually known by that name. From the point of view of the present applicant, who is engaged in preparing the chapter on Merostomata for the forthcoming international Treatise on Invertebrate Paleontology, the present case is one of exceptional urgency, for it is essential that a decision should be provided on the issue now submitted in time for it to be included in the relevant portion of the Treatise. It is particularly hoped, therefore, that it will be possible for the International Commission to reach a very early decision on the present application.
- 2. The facts of this case are as follows: In 1928, in Opinion 104 (Smithson. miscel. Coll. 73 (No. 5): 25) the International Commission on Zoological Nomenclature placed on the Official List of Generic Names in Zoology the generic name Limulus Müller (O.F.), 1785 (type species, by monotypy: Monoculus polyphemus Linnaeus, 1758, Sust. Nat. (ed. 10) 1:634). This extremely well-known name, which was then in universal use—as it still is today—was regarded not only as a nomenclatorially valid name, but also as the oldest available name for the genus in question. In 1940, however, the late R. Winckworth submitted a request to the International Commission (Bull. zool. Nomencl. 1:113-117) for a ruling on the question whether in his Zoologiae Fundamenta (then believed to have been published in 1772, but now known to have been first published in 1771) Brünnich had applied the principles of binominal nomenclature. Winckworth pointed out that, if the Commission were to give an affirmative answer to the foregoing question, there were a number of generic names which would in future rank for priority as from the Zool. Fund. and that one of these names, Xiphosura Brünnich (: 208), was older than, and would replace, the well-known name Limulus Müller, 1785. At Paris in 1948 the International Commission ruled in favour of the availability of the names in Brünnich's Zoologiae Fundamenta, holding the view that in this work Brünnich had duly complied with the requirements of Proviso (b) to Article 25 of the Règles (see 1950, Bull. zool. Nomencl. 4: 307-310).

^{*} Or Class Arachnida.

- 3. Having reached this general decision, the International Commission turned to consider the new names in the Fundamenta of Brünnich, of which it now became necessary to take account. When the Commission reached the name Xiphosura Brünnich, the Acting President (Mr. Francis Hemming) drew attention to the fact that the acceptance of this generic name would be objectionable from two points of view (1950, loc. cit. 4:311-312). First, that name, if accepted, would displace the time-honoured name Limulus Müller, which, moreover, had already been on the Official List for twenty years; second, the use of this word as a generic name would be confusing, in view of the fact that it was in general use as the name of the Order to which this genus belonged. The Commission did not feel able on that occasion to reach a decision on this question, but agreed that as soon as possible after the close of the Paris Congress consideration should be given to the question whether or not the plenary powers should be used for the purpose of validating the generic name Limulus Müller and thereby of regularising the position of that name on the Official List (1950, loc, cit. 4:312). At the same time the Commission asked the Secretary to confer with specialists and, having done so, to submit a Report to the Commission for consideration.
- 4. It will be seen, therefore, that the subject of the present application is one to which the Commission has already given preliminary consideration and on which it has asked for the views of specialists. Thus, the present application, although prompted mainly by a different object, namely a desire to obtain a decision needed for the preparation of the Treatise on Invertebrate Paleontology, will serve also to provide a basis for the consideration of the question to which the Commission gave special consideration in Paris, namely whether the position on the Official List of the name Limulus Müller should be regularised or, alternatively, whether that name should be removed from the Official List, the name Xiphosura Brünnich being added thereto in its place.
- 5. As has already been explained, the generic name Limulus Müller is in general use for the genus to which it was first applied by Müller, one hundred and sixty-six years ago. It is true that in 1902 (Ann. Mag. nat. Hist. (7) 9:260) Pocock sought to replace the name Limitus Müller by the older name Xiphosura Gronovius, 1764 (Zoophylac, gron. 2:220) but this proposal of his won no support from other workers. Moreover, the Zoophylacium gronovianum, as from which Pocock dated the name Xiphosura was written by an author (Gronovius) who, though a so-called "binary" author, did not apply the principles of binominal nomenclature. At the time that Pocock wrote his paper there was room for argument whether a generic name published by such an author possessed any status in zoological nomenclature and this doubt persisted until 1948 when the International Congress of Zoology made it quite clear that such names possess no status in zoological nomenclature, by deleting the ambiguous expression "nomenclature binaire" from the Règles, inserting in its place the perfectly definite expression "nomenclature binominale" (1950, Bull. zool. Nomencl. 4:63-66). It is now perfectly clear that the alleged generic name Xiphosura Gronovius. 1764. possesses no standing in zoological nomenclature. This objection does not however apply to the name Xiphosura Brünnich, 1771, which is undoubtedly an available name. In view of the

current general acceptance of the generic name Limulus Müller and the long period in which it has been in use, the desirability of promoting stability in nomenclature points strongly in favour of the preservation of the name Limulus Müller, as against the name Xiphosura Brünnich. These considerations are enormously strengthened by the fact that for over twenty years the name Limulus Müller has occupied an unchallenged position on the Official List of Generic Names in Zoology. The arguments would need to be very strong to justify the dethronement of the name Limulus Müller for the benefit of the unknown name Xiphosura Brünnich. In actual fact there are no arguments that can be advanced in favour of the overthrow of existing practice in this matter, apart from that based on the consideration that Brünnich's name Xiphosura was published fourteen years before Müller's name Limulus. The Law of Priority possesses many important merits, but it is important always to remember that that Law was fashioned to promote stability and uniformity in nomenclature and consequently that the purpose of that Law is defeated if, by an unduly rigid application of its provisions, it is allowed to become an instrument for overturning well-established nomenclatorial practice. There are therefore very strong grounds in favour of the use by the International Commission of its plenary powers to preserve the name Limulus Müller.

- 6. This matter is not, however, the sole concern of the student of the taxonomy of the living and fossil forms concerned. For the name Limulus Müller is deeply embedded in the literature of the morphology and ontogeny of this interesting group, and to the workers in the field of applied biology changes of well-known names for narrow technical reasons of a purely nomenclatorial character are peculiarly irritating and incomprehensible. Moreover, the International Congress of Zoology has given express directions that the interests of this class of worker are to be given special consideration by the International Commission in considering cases involving the possible displacement of well-known names (see, 1950, Bull. zool. Nomencl. 4:234-235). For this reason also it is highly desirable that the International Commission should use its plenary powers to prevent the supercession of the name Limulus Müller.
- 7. Finally, it must be observed that (as was pointed out in the discussion of this case in Paris) we are confronted here also with a reason of quite a different kind which would make it most undesirable that the name Xiphosura Brünnich should replace the name Limulus Müller. This is because the word (Xiphosura) of which Brünnich's name consists or derivatives of that word are commonly used to denote the higher categories to which the genus now known as Limulus belongs. Thus, according to the taxonomic view taken of the categories which should be recognised, the word "Xiphosura" is in use as the name of the Sub-Class or Order concerned, while the word "Xiphosurida "is used as the name of the Order. The Commission has ruled (in Opinion 102) that a generic name is not invalidated by the prior use, as an ordinal name, of the word of which that generic name is composed and this provision has since been incorporated in the Règles; in deciding so to codify this provision, the International Congress of Zoology decided also to insert a Recommandation deprecating the selection, as generic names, of words previously used as the names of units of Sub-Ordinal or higher category (1950, Bull. zool.

Nomencl. 4:164-165). In the present case, the use of the word "Xiphosura" as a generic name could not fail to give rise to confusion in the nomenclature of this group, and it is therfore extremely desirable from this point of view alone that the Commission should use its plenary powers to suppress the generic name Xiphosura Brünnich, 1771.

- 8. For the reasons set forth above, I ask the International Commission on Zoological Nomenclature:—
 - (1) to use its plenary powers to suppress the generic name Xiphosura Brünnich, 1771, for the purposes of the Law of Priority, but not for those of the Law of Homonymy;
 - (2) in view of (1) above, to confirm the generic name Limulus Müller, 1785, on the Official List of Generic Names in Zoology;
 - (3) to place the under-mentioned generic names or reputed generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:
 - (a) Xiphosura Gronovius, 1764 (an invalid name because published by an author who did not apply the principles of binominal nomenclature);
 - (b) Xiphosura Brünnich, 1771 (a name proposed, under (1) above, to be suppressed under the plenary powers);
 - (4) to place on the Official List of Specific Trivial Names in Zology the trivial name polyphemus Linnaeus, 1758 (as published in the binominal combination Monoculus polyphemus) (trivial name of the type species of Limulus Müller, 1785).

ON THE QUESTION WHETHER IT IS DESIRABLE THAT THE GENERIC NAME "LIMULUS" MÜLLER, 1785, SHOULD BE VALIDATED UNDER THE PLENARY POWERS AND CONFIRMED IN ITS POSITION ON THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY"

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(Commission's reference Z.N.(S.)506)

(Extract from a letter dated 12th March, 1951)

I am strongly of the opinion that the generic name Limulus Müller should be validated and confirmed on the Official List of Generic Names in Zoology. The contrary course would be most undesirable both because of text-book usage and because of the undesirability of removing a name from the Official List.